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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,441	08/16/2001	Sang Sun Lee	HI-0042	1268
34610	7590	11/04/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			WILDER, PETER C	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/930,441

Applicant(s)

LEE, SANG SUN

Examiner

Peter C. Wilder

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7, 11, and 12 are rejected under 35 U.S.C. 103(a) as being anticipated by Bayrakeri et al. (U.S. 6904610 B1) in view of Takahashi (U.S. 6181326 B1).

Referring to claim 1, Bayrakeri teaches a method for setting environment corresponding to a viewer's taste in a digital TV system including a TV connected with a server and a network (Column 2 lines 39-45 and Figure 1 teaches a network and a server and setting environments), the method comprising the steps of:

transmitting environmental information selected by the viewer to the server using an initial menu from the TV to the server (Column 26 lines 30-36 teaches transmitting a selection command of a set of channels which the examiner views as environmental information to the headend; Column 25 lines 16-23 along with Figure 3A teaches a menu screen to make changes of the IPG; Figure 1 is a depiction of the headend and Column 4 lines 50-56 teach the headend having a server); storing the environmental information into the server to correspond to the viewer's taste (Column 25 lines 7-8);

transmitting a download request of environmental information inputted by the viewer from the TV to the server (Column 25 lines 11-13); transmitting the environmental information corresponding to the download request from the server to the TV (Column 25 lines 13-15);

and executing the environmental information downloaded from the TV (Column 25 lines 13-15 the examiner reads "executing" in the claim as the same as "processes" in the reference), but fails to teach the TV in the above limitations includes all the functions of a set-top box.

Takahashi teaches a TV can include all the functions of a set-top box in the above claims (Column 5 lines 9-12).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the combined TV and set-top box function/device of Takahashi for the purpose of having a cheaper system.

Referring to claim 7, corresponding to claim 1, Bayrakeri teaches wherein the downloaded environmental information is changed into the viewer's environments through an environment change program (Column 25 lines 13-15 teaches receiving and processing, and modifying the Custom-IPG; Column 19 lines 26-30 teaches programs running on the set-top box so the Custom-IPG would be changed using a program).

Referring to claim 11, Bayrakeri teaches digital TV system for setting a viewer's environments using a network, the system comprising: a server for storing environmental information selected by the viewer (Column 25 lines 7-8 teaches storing the IPG at the head-end which would require a server to store it on), the server providing the environmental information when the viewer requests download (Column 25 lines 11-13 teaches a download request being transmitted, so the server that is storing the IPG would have to provide the IPG when it is requested); a network for connecting to the server (Figure 1 element 104 teaches a distribution network between the head-end and the set-top boxes and TVs); and a controller for transmitting the environmental information to the server (Column 26 lines 24-27 teaches the set-top box as the controller), the controller transmitting the download request to the server when the viewer requests download of the environmental information (Figure 1 teaches the information system element 100 which includes the head end element 102 is connected to the set-top box/controller element 106; Column 6 lines 54-58 teaches element 270 a controller inside the set-top box executing user interaction routines; the examiner views an IPG download request as a user interaction routine), the controller executing the environmental information downloaded from the server and changing the former environments into environments suitable for the viewer's taste (Column 25 lines 13-15 the examiner reads "executing" in the claim as the same as "processes" in the reference; Column 25 lines 13-15 teaches receiving and processing, and Modifying the Custom-IPG which would be of course to be to the viewers taste since its "custom"), but fails to teach the TV in the above limitations includes all the functions of a set-top box.

Takahashi teaches a TV can include all the functions of a set-top box in the above claims (Column 5 lines 9-12).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the combined TV and set-top box function/device of Takahashi for the purpose of having a cheaper system.

Referring to claim 12, Bayrakeri teaches the digital TV system according to claim 11, further comprising a memory for storing a menu for setting environments (Figure 2 elements 276-2 and 276-1 teaches memory in controller 270 which is inside the set-top box which is also considered the controller by the examiner; Column 6 lines 54-58 teaches the memory is used for dynamic overlays involving user interaction routines which customizing a IPG is considered), a program for executing the environmental information and the viewer's changed environments (Column 25 lines 13-15 teaches receiving and processing, and modifying the Custom-IPG; Figure 2 teaches element 270 which is a processor in a set-top terminal. A processor inherently requires a program running on it to display the IPG on the TV display and allow the viewer to make custom updates).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bayrakeri et al. (U.S. 6904610 B1) in view of Hendricks et al. (U.S. 5734853 B1) further in view of Donahue et al. (U.S. 6101180 B1) still further in view of Takahashi (U.S. 6181326 B1).

Referring to claim 2, corresponding to claim 1, Bayrakeri and Takahashi teach all the limitations in claim 1, including transmitting the environmental information from the TV to the sever includes viewer selection environment information (see rejection of claim 1), but fails to teach wherein in the step of transmitting the environmental information from the TV to the server, the environmental information includes TV address, server address, ID number, and viewer selection environment information.

Hendricks teaches the step of transmitting the environmental information from the TV to the server, the environmental information includes TV address (Figure 4b element 924' Column 17 lines 54-55; and Column 18 lines 19-23), ID number (Figure 4b element 928'; Column 17 lines 58-60), but fails to teach transmitting the server address.

Donahue teaches transmitting the environmental information from the TV to the server, the environmental information includes the server address (Column 7 lines 6-10 teaches a data packet being transmitted in system Figure 2 that includes the server address).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri

using the packet transmitting function/device of Hendricks further using the combined TV and set-top box function/device of Takahashi still further using the source address included in the packet function/device of Donahue for the purpose of determining the next path to take based on the source and destination address (Column 7 lines 17-18 Donahue).

Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bayrakeri et al. (U.S. 6904610 B1) in view of Hendricks et al. (U.S. 5734853 B1) further in view of Donahue et al. (U.S. 6101180 B1) further in view of LaRocca et al. (U.S. 6314572 B1) still further in view of Takahashi (U.S. 6181326 B1).

Referring to claim 3, corresponding to claim 1, Bayrakeri and Takahashi teach all the limitations in claim 1, and including the method according to claim 1, wherein in the step of transmitting the download request of environmental information from the TV to the server the download request includes the download request code (Column 25 lines 11-13 teaches delivering an a custom-IPG that means the transmitted request would have to have some type of code or identifier or else the headend would not know what to send back to the set-top box), but fail to teach the method according to claim 1, wherein in the step of transmitting the download request of environmental information from the TV to the server, the download request includes TV address, server address, ID number .



Hendricks teaches wherein in the step of transmitting the download request of environmental information from the TV to the server, the download request includes TV address (Figure 4b element 924' Column 17 lines 54-55; and Column 18 lines 19-23), ID number (Figure 4b element 928'; Column 17 lines 58-60), but fails to teach transmitting the server address download request code.

Danahue teaches the download request of environmental information from the TV to the server, the environmental information includes the server address (Column 7 lines 6-10 teaches a data packet being transmitted in system Figure 2 that includes the server address).

LaRocca teaches including the method according to claim 1, wherein in the step of transmitting the download request of environmental information from the TV to the server the download request includes the download request code (Column 9 lines 59-61 teaches sending a request corresponding to the selected menu which is the same as a download request code).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the packet transmitting function/device of Hendricks using the combined TV and set-top box function/device of Takahashi using the source address included in the packet function/device of Donahue further using the and download request code of LaRocca for the purpose of determining the next path to take based on the source and destination address (Column 7 lines 17-18 Donahue) and allowing the subscriber to subscribe to the selected SOD service (Column 10 lines 24-25 LaRocca).

Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bayrakeri et al. (U.S. 6904610 B1) further in view of LaRocca et al. (U.S. 6314572 B1) still further in view of Takahashi (U.S. 6181326 B1).

Referring to claim 5, corresponding to claim 1, Bayrakeri and Takahashi teach all the limitations in claim 1, but fail to teach the step of determining whether or not the viewer is registered based on the ID number included in the environmental information received from the TV.

Bayrakeri along with Hendricks and Takahashi teach an ID number included in the environmental information from the TV (see rejection of claim 2)

LaRocca teaches determining whether or not the viewer is registered based on the ID number (Column 8 lines 64-67 and Column 9 lines 1-10 teaches a TID pin which is a set-top ID to determine if the subscriber has access which is the same as determining if a subscriber is registered).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the ID checking function/device of LaRocca for the purpose providing SOD or service on demand services (Column 9 lines 18-19 LaRocca).

Claims 6, 8-10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayrakeri et al. (U.S. 6904610 B1) further in view of Dunn et al. (U.S. 5861906 B1) still further in view of Takahashi (U.S. 6181326 B1).

Referring to claim 6, Bayrakeri and Takahashi, teach all the limitations in claim 1, but fail to teach the method according to claim 1, wherein the step of transmitting the environmental information from the server to the TV includes the steps of: determining whether or not the viewer is registered based on the ID number included in the download request received from the TV (see rejection of claim 5); but fails to teach inquiring whether or not there is environmental information corresponding to the ID number.

Dunn teaches inquiring whether or not there is environmental information corresponding to the ID number (Column 8 lines 24-33 teaches checking the database at the headend to see if a viewers ID corresponds to Program IDs; the examiner views the program IDs as being related to IPG information).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the customer ID verification and data lookup function/device of Dunn for the purpose of allowing when the headend receives the viewer ID from the user interface unit, join table 114 is easily and quickly searched to find all program IDs that correlate to the viewer ID (Column 8 lines 56-58 Dunn).

Referring to claim 8, Bayrakeri teaches a method for controlling a viewer's environment setting in a TV connected with a server and a network, the method comprising the steps of: outputting initial menu in response to the viewer's request of environment setting (Column 24 lines 66-67 and Column 25 line 1 and Figure 1 teach modifying a IPG initially by the viewer); transmitting a download request of environmental information inputted by the viewer to the server based on the initial menu (Column 26 lines 30-38 teaches sending a request for data by each change made in the IPG); receiving environmental information corresponding to the download request from the server (Column 26 lines 36-38 teaches receiving the new IPG); and changing the former environments into environments suitable for the viewer's taste based on the downloaded environmental information (Column 26 lines 36-40 teaches displaying the new environments for the viewer), but fails to teach wherein the environmental information is inquired from the server based on the viewer's ID number and the TV in the above claim includes all the functions of a set-top box.

Dunn teaches wherein the environmental information is inquired from the server based on the viewer's ID number (Column 6 lines 64-67 and Column 7 lines 1-4 teaches a user using an EPG; Column 8 lines 24-33 along with Figure 6 teaches how at the head-end the programs in a user's customized list which are related to the EPG are identified by a users ID number), but fails to teach the TV in the above limitations includes all the functions of a set-top box.

Takahashi teaches a TV can include all the functions of a set-top box in the above claims (Column 5 lines 9-12).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the customer ID data lookup function/device of Dunn further using the combined TV and set-top box function/device of Takahashi for the purpose of allowing when the headend receives the viewer ID from the user interface unit, join table 114 is easily and quickly searched to find all program IDs that correlate to the viewer ID (Column 8 lines 56-58 Dunn) and the system of Takahashi to having a cheaper system.

Referring to claim 9, corresponding to claim 1 Bayrakeri and Takahashi teach further comprising the step of transmitting the environmental information selected by the viewer using the initial menu before the step of transmitting the download request of environmental information to the server (Column 26 lines 30-36 teaches transmitting selection of a set of channels which the examiner views as environmental information to the headend; Column 25 lines 16-23 along with Figure 3A teaches a menu screen to make changes of the IPG; Figure 1 is a depiction of the headend and Column 4 lines 50-56 teach the headend having a server), but fail to teach wherein the environmental information is stored in the server corresponding to the viewer's ID number.

Dunn teaches wherein the environmental information is stored in the server corresponding to the viewer's ID number (Column 6 lines 64-67 and Column 7 lines 1-4

teaches a user using an EPG; Column 8 lines 24-33 along with Figure 6 teaches how at the head-end the programs in a user's customized list which are related to the EPG are identified by a users ID number).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the combined TV and set-top box function/device of Takahashi using the customer ID data lookup function/device of Dunn for the purpose of allowing when the headend receives the viewer ID from the user interface unit, join table 114 is easily and quickly searched to find all program Ids that correlate to the viewer ID (Column 8 lines 56-58 Dunn).

Referring to claim 10, Bayrakeri teaches a method for providing a viewer's environments from a server connected with a TV and a network to the TV, the method comprising the steps of: receiving environmental information selected by the viewer (Column 25 lines 7-8); storing the environmental information corresponding to the viewer's ID number (Column 6 lines 64-67 and Column 7 lines 1-4 teaches a user using an EPG; Column 8 lines 24-33 along with Figure 6 teaches how at the head-end the programs in a user's customized list which are related to the EPG are identified by a users ID number); receiving a download request of environmental information inputted by the viewer from the TV (Column 25 lines 11-13); but fails to teach inquiring whether or not there is the viewer's environmental information based on the ID number included in the download request; reading the environmental information corresponding to the ID

number when the viewer's environmental information is inquired and transmitting the read environmental information to the TV, and the TV in the above limitations includes all the functions of a set-top box.

Dunn teaches inquiring whether or not there is the viewer's environmental information based on the ID number included in the download request (Column 13 lines 4-11); reading the environmental information corresponding to the ID number when the viewer's environmental information is inquired (Column 13 lines 15-17 teaches the programs records are transmitted that correspond to the ID number so the programs records are read); and transmitting the read environmental information to the TV (Column 13 lines 15-21).

Takahashi teaches a TV can include all the functions of a set-top box in the above claims (Column 5 lines 9-12).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the customer ID data lookup read and transmission function/device of Dunn further using the combined TV and set-top box function/device of Takahashi for the purpose of allowing when the headend receives the viewer ID from the user interface unit, join table 114 is easily and quickly searched to find all program IDs that correlate to the viewer ID (Column 8 lines 56-58 Dunn) and the system of Takahashi to having a cheaper system.

Referring to claim 18, Bayrakeri teaches a server system comprising: a memory for storing database and program (Column 5 lines 38-42 and Figure 1 element 122 teaches requesting video which the examiner views as programs and information from a server which the examiner views as a database and a server has memory); and a processor connected to the memory and executing the program (Column 5 lines 42-45 teaches element 120 which is connected to element 122 which is the information server; Column 4 lines 57-65 teaches element 120 as managing the flow of transmissions between the set-top terminals and the head-end; It is inherent that this element would have to have a program running on it in order to function), wherein the processor performs, by the program, the steps of (A program would have to do the following on element 120 or else the video session manager would not work): receiving environmental information selected by a viewer (Column 26 lines 30-36 teaches sending up custom-IPG related data to the head-end which Figure 1 shows the data would have to go through element 120 to enter the head-end); but fails to teach storing the environmental information corresponding to the viewer's ID number; inquiring whether or not there is the viewer's environmental information based on the ID number included in the download request; and reading the environmental information corresponding to the ID number if the viewer's environmental information is inquired, and the TV in the above limitations includes all the functions of a set-top box.

Dunn teaches a processor using a program to store the environmental information corresponding to the viewer's ID number (See rejection of claim 9 and for



the rest of the processor limitations Figure 1 element 44 teaches a server which inherently needs a program operating on it to function);

Bayrakeri teaches receiving a download request of environmental information inputted by the viewer (Column 25 lines 11-13 teaches delivering the custom-IPG when requested);

Dunn teaches a processor using a program to inquire whether or not there is the viewer's environmental information based on the ID number included in the download request (Column 13 lines 4-11);

Dunn teaches a processor using a program to read the environmental information corresponding to the ID number if the viewer's environmental information is inquired (Column 8 lines 56-61 teaches finding programs that related to the viewer ID and Figure 1 element 44 teaches a server which inherently needs a program operating on it to function).

Bayrakeri teaches a processor using a program to transmit the read environmental information to a TV (Column 25 lines 11-13 teaches delivering the custom-IPG; Column 5 lines 45-48, Column 6 line 30 and Figure 2 teaches element 272 a microprocessor which inherently requires programming to operate).

Takahashi teaches a TV can include all the functions of a set-top box in the above claims (Column 5 lines 9-12).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the processor performing by use of a program the storing, inquiring, and reading

by use of the users ID number function/device of Dunn further using the combined TV and set-top box function/device of Takahashi for the purpose of allowing when the headend receives the viewer ID from the user interface unit, join table 114 is easily and quickly searched to find all program Ids that correlate to the viewer ID (Column 8 lines 56-58 Dunn) and for the purpose of having a cheaper system.

Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bayrakeri et al. (U.S. 6904610 B1) in view of Takahashi (U.S. 6181326 B1) further in view of Hendricks et al. (U.S. 5861906 B1).

Referring to claim 13, Bayrakeri and Takahashi teach all the limitations in claim 12, but fail to teach wherein the memory includes at least one of an EEPROM, a flash ROM and an HDD.

Hendricks teaches wherein the memory includes at least one of an EEPROM, a flash ROM and an HDD (Column 17 lines 14-17).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the combined TV and set-top box function/device of Takahashi further using the memory of Hendricks for the purpose providing the desired flexibility in the menu format while still limiting the amount of information needed to be communicated via the program control information signal (Column 17 lines 17-20 Hendricks)

Claims 4, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayrakeri et al. (U.S. 6904610 B1) in view of Takahashi (U.S. 6181326 B1) further in view of Wehmeyer et al. (U.S. 6169543 B1).

Referring to claim 4, Bayrakeri and Takahashi teach all the limitations in claim 1, but fail to teach the method further comprising the step of outputting the initial menu in response to the viewer's request of environment setting from the TV before the step of transmitting to the server.

Wehmeyer teaches the method further comprising the step of outputting the initial menu in response to the viewer's request of environment setting from the TV before the step of transmitting to the server (Column 11 lines 32-37; Column 7 lines 61-67 and Column 8 lines 1-3 teaches the EPG data being stored in memory and generated from memory, so no transmission to the server would be required to generate the initial menu).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the combined TV and set-top box function/device of Takahashi further using the menu display before transmission function/device of Wehmeyer for the purpose of being able to customize a program guide with the first step in the method comprising storing program guide information into an electronic host device (Column 2 lines 50-53 Wehmeyer).

Referring to claim 14, Bayrakeri and Takahashi teach all the limitations in claim 11, but fail to teach the digital TV system according to claim 11, wherein the controller reads the initial menu from the memory for allowing the viewer to select the environmental information and provides onto a screen.

Wehmeyer teaches wherein the controller reads the initial menu from the memory for allowing the viewer to select the environmental information and provides onto a screen (Column 11 lines 7-10 and Column 11 lines 29-37 teaches storing and displaying the EPG).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the combined TV and set-top box function/device of Takahashi further using the menu stored in memory for display function/device of Wehmeyer for the purpose of being able to customize a program guide with the first step in the method comprising storing program guide information into an electronic host device (Column 2 lines 50-53 Wehmeyer).

Referring to claim 16, Bayrakeri teaches a digital TV device connected with a server and a network (Figure 1 and Figure 2 and Column 5 lines 46-48; Column 5 lines 26-29 teaches MPEG which is digital), the digital TV device comprising: input means for inputting a viewer's environmental information (Column 6 lines 49-54 teaches a remote

control unit and Column 26 lines 24-25); display means for providing the viewer with initial menu for selecting the environmental information (Column 5 lines 46-48 teaches display means; Column 25 lines 16-19 teaches initially displaying the IPG); network connecting means for transmitting the environmental information to the server through the network and downloading the environmental information from the server (Figure 1 element 104 is distribution network and Column 26 lines 30 – 41 teaches receiving an updated copy of a custom-IPG thus transferring information from one source to another which is downloading); and controlling means for executing the environment change program (Column 25 lines 13-14 teaches receiving and processing the Custom-IPG the examiner viewing processing the same as executing) and controlling for changing the former environments into the viewer's environments if the environmental information is input from the network connecting means through the network (Column 25 lines 1-9 teaches making modifications to the custom-IPG and having the modifications take place at the head-end so the information is input from the network; the network is element 104 in Figure 1), but fails to teach storing means for storing the initial menu, environment change program and changed environmental information, and the TV in the above limitations includes all the functions of a set-top box.

Wehmeyer teaches storing means for storing the initial menu (Column 5 lines 57-66 teaches storing capabilities for the EPG data and graphics; Column 13 lines 2-10 teaches the menu being an initial menu), environment change program (Column 8 lines 1-3 teaches software control program which is viewed as being the same as

environment change program by the examiner) and changed environmental information (Column 14 lines 16-25 teaches saving the modified EPG).

Takahashi teaches a TV can include all the functions of a set-top box in the above claims (Column 5 lines 9-12).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the menu stored in memory for display function/device of Wehmeyer using the combined TV and set-top box function/device of Takahashi for the purpose of being able to customize a program guide with the first step in the method comprising storing program guide information into an electronic host device (Column 2 lines 50-53 Wehmeyer) and for the purpose of having a cheaper system.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bayrakeri et al. (U.S. 6904610 B1) in view of Takahashi (U.S. 6181326 B1) further in view of LaRocca et al. (U.S. 6314572 B1) still further in view of Dunn et al. (U.S. 5861906)

Referring to claim 15, Bayrakeri and Takahashi teach all the limitations in claim 11, but fail to teach the digital TV system wherein the server includes: a viewer confirmation part for confirming whether or not the viewer is registered; a viewer request determining part for determining the request received from the controller if the viewer is registered; a database inquiry part for inquiring the viewer's environmental information

based on the ID number if the request is the download request of environmental information; and a database for storing the environmental information selected by the viewer to correspond to the ID number.

LaRocca teaches a viewer confirmation part for confirming whether or not the viewer is registered (see rejection of claim 5), a viewer request determining part for determining the request received from the controller if the viewer is registered (Column 10 lines 36-40 teaches the subscriber terminal sending IPG related data to the video session manager, element 122 in Figure 1; Server element 125 in element 122 then sends back down an IPG related packet of information to the user terminal, thus the session manager had to determine the category request from the subscriber in order to send the correct category packet to the subscriber, so the session manager has a request determining part); but fails to teach a database inquiry part for inquiring the viewer's environmental information based on the ID number if the request is the download request of environmental information; and a database for storing the environmental information selected by the viewer to correspond to the ID number.

Dunn teaches database inquiry part for inquiring the viewer's environmental information based on the ID number if the request is the download request of environmental information (Column 7 lines 56-66 teaches download IPG related information based on the user ID number); and a database for storing the environmental information selected by the viewer to correspond to the ID number (See rejection of claim 6).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the combined TV and set-top box function/device of Takahashi further using the viewer confirmation and request function/device of LaRocca still further using the database inquiring and storage based on viewers ID number function/device of Dunn for the purpose for the purpose of providing SOD or service on demand services (Column 9 lines 18-19 LaRocca).

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bayrakeri et al. (U.S. 6904610 B1) in view of Wehmeyer (U.S. 6169543 B1) further in view of Ellis et al. (U.S. 2005/0028208 A1) further in view of Takahashi (U.S. 6181326 B1).

Referring to claim 17, Bayrakeri, Takahshi and Wehmeyer teach all the limitations in claim 16, as well as the device wherein the controlling means reads the initial menu from the memory (Column 5 lines 57-66 teaches storing capabilities for the EPG data and graphics; the controlling means is the software routine; Column 13 lines 2-10 teaches the menu being an initial menu; the controlling means is the software routine, Wehmeyer), the outputs the same to the display means (Column 5 lines 66-67 and Column 6 lines 1-5 teaches the EPG menu going to element 1155 the video signal processor which is connected to the display according to Figure 1), but fails to teach the



outputs the same to the display means, receives the environmental information or a download request from the input means and controls to output the same to the network connecting means.

Ellis teaches as the device receives the environmental information or a download request from the input means and controls to output the same to the network connecting means (The examiner views the second "same" in the claim as referring to either the "environmental information" or the "download request"; Figure 2a and ¶[0071] teaches a remote program guide device element 24 accessing the program guide from element 16, the user television equipment element 22 has to receive the program guide "environmental information" and then transmit or output the data to element 24).


At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the environment modifying function/device of Bayrakeri using the menu stored in memory for display function/device of Wehmeyer further using the combined TV and set-top box function/device of Takahashi still further using the receiving and outputting function/device of Ellis for the purpose of allowing the user the opportunity to remotely schedule a reminder for a program (¶[0015] Ellis).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter C. Wilder whose telephone number is 571-272-2826. The examiner can normally be reached on 8 AM - 4PM Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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